

REMARKS

In response to the Office Action dated May 30, 2003, claims 1, 21, 42 and 43 are amended, and claims 31-41 are cancelled. Claims 1-5, 14-30 and 42-44 are now active in this application. No new matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102 AND § 103

I. Claims 1, 2, 4, 5, 14-30, 43 and 44 are rejected under 35 U.S.C. § 102(e) as being anticipated by Maiefski et al. (USPN 6,416,718). Although not listed, it is believed that the Examiner intended to include claim 42 in this rejection.

In the Official Action dated November 13, 2003, the Examiner contends that “the claims are drafted in a manner in which the speed at which the piston moves is in the form of a process limitations. The position changing means is a means for changing positions and is not considered to include the function of changing speeds.”

To expedite prosecution, and as suggested by the Examiner, independent claim 1 is amended to delineate, *inter alia*:

position changing means including a means for varying a sliding speed of said piston, wherein said means for varying said sliding speed is an actuator for changing a position of said piston with said piston holding means to suck a liquid into said pipette at a first speed and for changing said position of said piston with said piston holding means by a short distance with respect to said pipette holding means at a second speed higher than said first speed to jet a portion of said liquid in said pipette through said nozzle as a drop, wherein said short distance is determined in accordance with a desired amount of said jetted portion of said liquid.

Independent claim 21 is amended to delineate, *inter alia*:

position changing means including a means for varying a pulse rate of said pistol, wherein said means for varying said pulse rate is a linear pulse motor for changing a position of said piston with said piston holding means

in response to a pulse signal at a first pulse rate to suck said liquid into said pipette and for changing said position of said piston with said piston holding means by a short distance with respect to said pipette holding means in response to said pulse signal at a second pulse rate to jet a portion of a liquid in said pipette through said nozzle as a drop, wherein said second pulse rate is higher than said first rate, and wherein said short distance is determined in accordance with a desired amount of said jetted portion of said liquid.

Independent claim 42 is amended to delineate, *inter alia*:

position changing means including a means for varying a sliding speed of said piston, wherein said means for varying said sliding speed is an actuator for changing a position of said piston with said piston holding means to suck a liquid into pipette at a first speed and for changing said position of said piston with said piston holding means by a short distance with respect to said pipette holding means at a second speed higher than said first speed to jet a portion of said liquid in said pipette through said nozzle as a drop...

Independent claim 43 is amended to delineate, *inter alia*:

position changing means including a means for varying a sliding speed of said piston, wherein said means for varying said sliding speed is an actuator for changing a position of said piston with said piston holding means to suck a liquid into said pipette at a first speed whereby a space is prevented from being formed between the inner wall of said pipette and a sliding surface of said piston which is to be kept in fluid-tight contact with the inner wall of said pipette and for changing said position of said piston with said piston holding means by a short distance with respect to said pipette holding means at a second speed higher than said first speed to jet a portion of said liquid in said pipette through said nozzle as a drop, wherein said short distance is determined in accordance with a desired amount of said jetted portion of said liquid.

Consequently, amended independent claims 1, 21, 42 and 43, as well as dependent 2, 4, 5, 14-20, 22-30 and 44 are patentable over Maiefski et al. and their allowance is respectfully solicited.

II. Claims 3 and 31-41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Maiefski et al. in view of Kowallis (USPN 6,245,297), newly cited also, relied upon by the Examiner as disclosing a position changing means that comprises piezoelectric actuator.

The rejections are moot as to cancelled claims 31-41. As claim 3 depends from amended independent claim 1, claim 3 is patentable over Maiefski et al. also, even when considered in view of Kowallis. Thus the allowance of dependent claim 3 is respectfully solicited also.

CONCLUSION

Accordingly, it is urged that the application, as now amended, overcomes the rejection of record and is in condition for allowance. Entry of the amendment and favorable reconsideration of this application, as amended, are respectfully requested. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

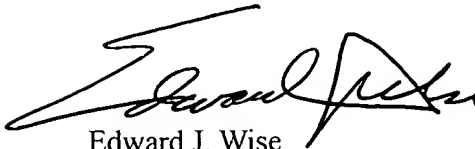
To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this

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paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Edward J. Wise', with a stylized, sweeping flourish at the end.

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